

REMARKS

The present application includes claims 1-18. The Examiner has required restriction to the one of the inventions of claims 1-10 and 18 and claims 11-17. The Applicants elected the invention of claims 1-10 and 18 with traverse telephonically on September 13, 2005. Claims 1-10 and 18 were rejected by the Examiner.

The applicant respectfully submits that Claims 1- 10 and 18 are patentable for the reasons provided below.

Election

Pursuant to the Examiner's request, the Applicants affirm their election of the invention of claims 1-10 and 18 with traverse. The restriction requirement is respectfully traversed because "[i]f the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to distinct or independent inventions." MPEP § 803. One of the "two criteria for a proper requirement for restriction between patentably distinct inventions" is that "[t]here must be a serious burden on the examiner if restriction is not required" MPEP § 803 (emphasis added). While "[f]or purposes of the initial requirement a serious burden on the examiner may be prima facie shown if the examiner shows by appropriate explanation either separate classification, separate status in the art, or a different field of search . . . [t]hat prima facie showing may be rebutted by appropriate showings or evidence by the applicant." MPEP § 803 (emphasis added).

No serious burden is shown that justifies restriction. First, no different field of search is shown for the two separate inventions. Secondly, the mode of operation of all the claims is the

same. All the claims operate to remove alkalinity from the aqueous dispersion. The invention operates to stabilize a carbon dispersion by reducing alkalinity or by isolating the dispersion from reactive atmospheric gases. Therefore, the two alleged operations of the invention perform the same task and treat the same kind of materials. Thus, the restriction requirement should be withdrawn.

Specification

Pursuant to the Examiner's request, the Applicants have amended the specification to refer to the issued patent number of the parent application.

Pursuant to the Examiner's request, the Applicants have amended the specification to capitalize the trademark "BROOKFIELD" throughout.

The Applicants' amendments to the specification add no new subject matter to the specification.

Obviousness Type Double Patenting

The judicially created rule against obviousness-type double patenting has been cited respecting claims 1-10 of this application and various claims of U.S. Pat. No. 6,623,787. In response, the Applicants submit with this Amendment a terminal disclaimer with respect to claims 1-10 to overcome the Examiner's double patenting obviousness rejection.

35 U.S.C. § 102 (Novelty)

The Examiner rejects claims 1-9 as being anticipated by U.S. Pat. No. 5,476,580 to Thorn. Thorn teaches a composition and process for preparing a non-conductive substrate for

electroplating. The composition comprises 0.1 to 20% by weight carbon (e.g. graphite or carbon black) having a mean particle size within the range of 0.05 to 50 microns; optionally, 0.01 to 10% by weight of a water soluble or dispersible binding agent for binding to the carbon particles; optionally, an effective amount of an anionic dispersing agent for dispersing the bound carbon particles; optionally, an amount of a surfactant that is effective for wetting the through hole; a pH within the range of 4-14; and an aqueous dispersing medium. Thorn at Abstract.

Thorn does not disclose all the limitations of claim 1 and thus does not anticipate claims 1-9. Claim 1 recites a “method of stabilizing a carbon dispersion” that includes “reducing the alkalinity of the viscosity-unstable aqueous dispersion of carbon.” The Examiner asserts that Example 4 of Thorn teaches “reducing the alkalinity of the viscosity-unstable aqueous dispersion” because Example 4 discloses adding potassium bicarbonate to a dispersion. Thorn at 15:40-16:5. However, the addition of potassium bicarbonate would increase the ionic strength of the dispersion and thus would destabilize the dispersion. In fact the specification of the pending application teaches against using a compound such as potassium bicarbonate: “One example of the invention is to add a reagent to the dispersion to reduce its alkalinity without increasing its ionic strength. An example of this is adding a substance . . . that will react with the ammonia and form non-ionic addition products.” See specification at ¶ 50 (emphasis added). Therefore, Thorn in fact does not teach “stabilizing a carbon dispersion” as recited in claim 1.

Furthermore, Thorn does not teach, nor suggest, a “viscosity-unstable aqueous dispersion of carbon that . . . is susceptible to a viscosity increase during use” or reducing the alkalinity of the dispersion “by an amount effective to reduce the susceptibility of the carbon dispersion to a viscosity increase,” as recited in claim 1. While Example 4 states that the viscosity of the dispersion

is 145 cps prior to the reduction of alkalinity, Thorn simply does not disclose that the dispersion is susceptible to a viscosity increase or reducing the alkalinity by an amount effective to reduce the susceptibility of the carbons dispersion to a viscosity increase.

Thus, Thorn does not teach all the limitations of Claim 1 either explicitly or inherently, and thus Thorn does not anticipate Claim 1. Since Claims 2-9 are dependent on Claim 1, they also are not anticipated by Thorn reference. The Applicants therefore respectfully submit that claims 1-9 are novel.

The Examiner further rejects claims 1-9 as obvious over Thorn, stating that Thorn teaches the same composition as claimed in claim 1 and that one of ordinary skill in the art at the time the invention was made would have expected that that the viscosity-instability and susceptibility to viscosity increase of the Thorn composition would inherently be the same as claimed in claim 1. To the extent that the Examiner is making an obviousness rejection based on Official Notice of the subject of the statements – that is, the Examiner is asserting Official Notice that the subject of the statements is common knowledge -- the Applicants respectfully traverse the Examiner's assertions. The Applicants respectfully submit that the subject matter of the Examiner's assertion of Official Notice is not well-known in the art as evidenced by the searched and cited prior art. The Applicants respectfully submit that the Examiner has performed "a thorough search of the prior art," as part of the Examiner's obligation in examining the present application under MPEP § 904.02.

Additionally, the Applicants respectfully submit that the Examiner's searched and cited references found during the Examiner's thorough and detailed search of the prior art are indicative of the knowledge commonly held in the art. However, in the Examiner's thorough and detailed search of the relevant prior art, none of the prior art taught or suggested the subject

matter of the Examiner's assertion of Official Notice. That is, the Examiner's thorough and detailed search of the prior art has failed to yield any mention of the teachings that the Examiner is asserting as widely known in the art. The Applicants respectfully submit that if the subject matter of the Examiner's assertion of Official Notice had been of "notorious character" and "capable of instant and unquestionable demonstration as being well-known" under MPEP § 2144.03(A), then the subject matter would have appeared to the Examiner during the Examiner's thorough and detailed search of the prior art.

If the Examiner had found any teaching of relevant subject matter, the Examiner would have been obligated to list the references teaching the relevant subject matter and make a rejection. Consequently, the Applicants respectfully submit that the prior art does not teach the subject matter of the Examiner's assertion of Official Notice and respectfully traverse the Examiner's assertion of Official Notice. Under MPEP 2144.03, the Examiner is now obligated to provide a reference(s) in support of the assertion of Official Notice if the Examiner intends to maintain any rejection based on the assertion of Official Notice. Additionally, the Applicants respectfully request the Examiner reconsider the assertion of Official Notice and provide to Applicants any basis for the Examiner's assertion of Official Notice.

35 U.S.C. § 103 (Non-obviousness)

The Examiner has rejected claim 10 as obvious over Thorn in view of U.S. Pat. No. 5,718,746 to Nagasawa. Nagasawa discloses a process for producing aqueous pigment ink which forms a black matrix having high optical density, flatness of a film and low conductivity, and imparts high resolution power to a color filter. The process comprises the steps of: finely dispersing a carbon black having an oil absorptivity of not more than 100 ml/100 g in an aqueous medium; and oxidizing the carbon black by using a hypohalite. Nagasawa at Abstract.

The Applicants respectfully submit that the combination of Thorn and Nagasawa does not disclose all the limitations of claim 10 and therefore does not render claim 10 obvious. As discussed above, Thorn does not teach or suggest a “method of stabilizing a carbon dispersion”, a “viscosity-unstable aqueous dispersion of carbon that ... is susceptible to a viscosity increase during use,” or reducing the alkalinity of the dispersion “by an amount effective to reduce the susceptibility of the carbon dispersion to a viscosity increase,” as recited in claim 1. Furthermore, Nagasawa does not teach these limitations either.

Additionally, neither Nagasawa, nor Thorn, teaches, or suggests, “ammonia in a concentration sufficient to make [the dispersion of carbon] susceptible to a viscosity increase when exposed to the atmosphere” or “reducing the concentration of ammonia in the viscosity-unstable aqueous dispersion of carbon” as recited in claim 10. While Nagasawa discloses “[a]s a pH controlling agent, there can be used aqueous ammonia,” Nagasawa does not explicitly or inherently teach ammonia in a concentration sufficient to make the dispersion of carbon susceptible to a viscosity increase when exposed to the atmosphere. Nor does Nagasawa explicitly or inherently teach reducing the concentration of ammonia in the dispersion of carbon as part of reducing alkalinity. The combination of Thorn and Nagasawa simply does not teach all the limitations of claim 10, and thus the Applicants respectfully submit that claim 10 is not obvious over Thorn in view of Nagasawa.

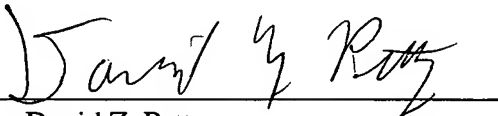
The Examiner has also rejected claim 18 as being unpatentable under 35 U.S.C. § 103(a) over Thorn. The Applicants respectfully submit that claim 18 is not obvious over Thorn. Claim 18 recites a dispersion of carbon having “a viscosity of less than about 20 cps and a conductivity of less than about 3 mS.” Thorn discloses an aqueous solution having a viscosity in the range of 25-800 cps and does not at all teach or disclose the solution having a conductivity of less than about 3 mS.

Therefore, Thorn does not teach, nor suggest, all the limitations of claim 18. The Examiner asserts that "one of ordinary skill in the art at the time the invention was made would have expected that the conductivity of the Thorn composition would inherently be the same as claimed" and that "it would have been obvious to a person of ordinary skill in the art to reduce the viscosity of the Thorn composition to less than 20cps for the purpose of improving the flow of the dispersion." No support is provided for these assertions of obviousness. Again, to the extent that the Examiner is making an obviousness rejection based on Official Notice of the subject of the statements -- that is, the Examiner is asserting Official Notice that the subject of the statements is common knowledge -- the Applicants respectfully traverses the Examiner's assertions for the reasons discussed above and respectfully request the Examiner reconsider the assertion of Official Notice and provide to Applicants any basis for the Examiner's assertion of Official Notice.

Conclusion

The Applicants respectfully submit that they have shown that this application satisfies all the legal requirements pointed out by the Examiner. Therefore, the Examiner is respectfully requested to prepare a Notice of Allowability allowing all the pending Claims 1-10 and 18.

Respectfully submitted,

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